



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/718,473	11/20/2003	Olaf Kortum	67467	1039
48940 7590 12/11/2007 FITCH EVEN TABIN & FLANNERY 120 S. LASALLE STREET SUITE 1600 CHICAGO, IL 60603-3406			EXAMINER CHAWLA, JYOTI	
			ART UNIT 1794	PAPER NUMBER
			MAIL DATE 12/11/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/718,473

Applicant(s)

KORTUM ET AL.

Examiner

Jyoti Chawla

Art Unit

1794

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 September 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Applicant's amendments filed September 21, 2007 have been entered. Claim 1 has been amended and claims 8-12 have been cancelled. Claims 1-7 are pending and examined in the application.

Priority

Acknowledgment is made of applicant's claim for foreign priority based on an application filed in Europe on November 27, 2002. It is noted, however, that applicant has not filed a certified copy of the application as required by 35 U.S.C. 119(b). It is noted that applicant's amendment and response dated September 21, 2007 does not include the priority document requested in the previous office action.

Claim Rejections - 35 USC § 102

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Rejection of claims 1, 2, 4-5, and 7 under 35 U.S.C. 102(b) as being anticipated by Andrews (US 4569847) has been withdrawn in light of applicant's amendments filed September 21, 2007.

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

(A) Claims 1-5, and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Andrews (US 4569847) in view of Wiley's Encyclopedia of Food Science and Technology.

Andrews teaches of cheese based coating preparation comprising 10-60% dried cheese powder by weight of the composition (Column 2, lines 60-66 and Column 4, lines 1-7), which falls within the recited range of the applicant for cheese powder in claims 1 and 5

Art Unit: 1794

(i.e., 5-70% and 10-30% respectively). The cheese powders in the coating as taught by Andrews include Cheddar and Swiss (Emmentaler) cheese powders (Column 8, lines 5-20 and Table 1) as recited by the applicant in claim 2.

Regarding the amount of cocoa replacement fat, Andrews teaches of adding hard butter (i.e., cocoa fat replacement) in the range of 20-60% (Column 2, lines 66-67 and Column 4, lines 24-34). Andrews defines "hard butter" as any of a large number of confectionery hard fat having a Wiley melting point in the range of about 84-120 °F and an approximate solid-fat Index or SFI of about 40-80 °F (Column 5, line 65 to Column 7, line 20). Thus Andrews teaches of cocoa replacement fat in the ranges recited by the applicant in claims 1 and 4 (i.e., 10-70% and 20-40% respectively).

Regarding the amount of emulsifier, Andrews teaches of emulsifier in the cheese based coating composition (Column 4, lines 53). Andrews teaches of adding 0.4% to 0.8% lecithin (Column 3, lines 3-4 and Column 9, lines 19-20) to the coating composition. Since lecithin is a known emulsifier, therefore, Andrews teaches of emulsifier in the recited range of the applicant in claims 1 and 7 (i.e., 0-3% and 0.5-1.5% respectively).

Regarding the amount of salt, Andrews teaches of addition of minor amounts of salt and pepper (Column 9, lines 14-16). Andrews also teaches of 0.1% salt in the coating composition of Examples 1-4. Thus the reference teaches of salt in the coating composition as recited in claim 1.

Regarding skim milk powder (non-fat milk powder), Andrews teaches of 25-40% by weight of carbohydrate and protein filler materials such as non-fat dry milk (i.e., skim milk powder), demineralized whey solids, lactose, fructose, sucrose and blends thereof (Column 4, lines 51-68), which includes the range recited by the applicant in claim 1. Andrews also teaches of nonfat dry milk in the range of about 10% (Columns 10-12, examples 1, 2 and 4).

Regarding the addition of lactose to the cheese based coating composition, Andrews teaches Lactose as one of the carbohydrates added as filler to the coating composition.

Regarding the specific amount of Lactose, Andrews teaches of 10-15% lactose

Art Unit: 1794

(Columns 10-12, Examples 1-4). The reference also teaches the addition of Demineralized cheese whey solids. Dried whey solids have been known to contain about 70-75% Lactose and 7-12% minerals/ ash. The demineralized dried whey, where 25% ash content is removed (Column 10, example 1), would have at least 70-75% lactose in the whey solids. Andrews teaches of 10-15% lactose and 9% total whey solids (Column 10, Example 1). 9% whey solids would have about 6-7% additional lactose (i.e., $9 \times 70 / 100 = 6.3\%$ to $9 \times 75 / 100 = 6.75\%$). Thus the total lactose content as taught by Andrews falls in the range of 16-22% (i.e., 10-15% as lactose and 6-7% as part of the dried whey, as discussed above), which is less than the amount recited in claim 1. However, lactose is a well known milk based sugar which is used as filler in cheese based coatings as taught by Andrews. Andrews also teaches of varying the amount of filler material (including lactose) from 25-40% of the cheese product composition. Lactose was known as a bulk additive at the time of the invention. Lactose is less sweet as compared to sucrose as is known to provide body and texture while contributing less sweetness. Also Lactose has adsorptive properties which make it appropriate as a carrier of flavors and aromas, as taught by Wiley's Encyclopedia of Food Science and Technology (Pages 1640-1641). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Andrews and increase the amount of lactose as the bulking agent and otherwise in the cheese based coating/filling composition in order to make a cheese product which has a lesser sweet notes as compared to the ones comprised of sucrose or dextrose. One would have been further motivated to increase the amount of lactose in the cheese based product in order to make a cheese product with better aroma and flavor carrying capacity.

Further, applicant's attention is invited to *In re Levin*, 84 USPQ 232 and the cases cited therein, which are considered in point in fact situation of the instant case. At page 234, the Court stated as follows:

This court has taken the position that new recipes or formulas for cooking food which involve the addition or elimination of common ingredients, or for treating them in ways which differ from the former practice, do not amount to invention, merely because it is

Art Unit: 1794

not disclosed that, in the constantly developing art of preparing food, no one else ever did the particular thing upon which the applicant asserts his right to a patent. In all such cases, there is nothing patentable unless the applicant by a proper showing further establishes a coaction or cooperative relationship between the selected ingredients, which produces a new, unexpected and useful function. In re Benjamin D. White, 17 C.C.P.A. (Patents) 956, 39 F.2d 974, 5 USPQ 267; In re Mason et al., 33 C.C.P.A. (Patents) 1144, 156 F.2d 189, 70 USPQ 221.

Regarding the amount of skim milk powder as recited in claim 3, Andrews teaches of 25-40% by weight of carbohydrate and protein filler materials that are compatible with cheese powders, such as non-fat dry milk (i.e., skim milk powder), demineralized whey solids, lactose, fructose, sucrose and blends thereof (Column 4, lines 51-68). Andrews also teaches about 10% of non-fat milk in the cheese based coating composition by way of examples (Columns 10-12, examples 1, 2 and 4). Andrews further teaches the addition of cheese powders, such as, Cheztone 100, 101 and 700, Beatone 700, etc., cheese flavoring materials that contain non-fat dry milk as an ingredient of the cheese flavor powder (Tables 1 and 2). Thus effectively the amount of skim milk powder in the cheese based coating composition taught by Andrews is more than the amount shown in the ingredient list shown in examples 1-4. Andrews also teaches that it is desirable that filler particles be substantially bland and free of fat (e.g., non-fat dry milk) in order to have an optimal control of properties of finished product (Column 5, lines 13-16). Thus skim milk powder or non-fat dry milk powder is a known component of both cheese powders and cheese based dry coatings (Andrews), and the addition of bland and substantially fat free fillers, such as non-fat dry milk, in the amount recited was also known in the art at the time of the invention as discussed above. Addition of about 10% or more non-fat dry milk as an ingredient and as component of the cheese flavor powder composition, in the coating composition was also known at the time of the invention (Andrews). Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify Andrew and increase the amount of non-fat dry

Art Unit: 1794

milk in the coating composition to more than 10%, in order to increase the general nutritional value and specifically the calcium content of the coating composition. One would have been further motivated to increase the amount of non-fat milk powder to dilute the lipid phase without altering the cheese flavor of the finished coating composition. Therefore, claim 3, as recited is obvious over Andrews.

(B) Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Andrews and Wiley's Encyclopedia of Food Science and Technology, further in view of Fundamentals of Cheese Science.

Andrews (US 4569847) in view of Wiley's Encyclopedia of Food Science and Technology, has been applied to claims 1-5 and 7 above.

Regarding the amount of salt as recited in claim 6, Andrews teaches of addition of minor amounts of salt and pepper (Column 9, lines 14-16). Andrews also teaches of 0.1% salt in the coating composition of Examples 1-4. Andrews also teaches of dried cheese powders, such as, Cheztone 100 and 101, which contain salt as part of the cheese powder composition. Thus Andrews teaches of salt above 0.1% in the cheese based coating composition (salt as such and as part of the cheese powder). Andrews does not specifically teach of the amount of salt in the range recited by the applicant (i.e., 0.5 to 1.5%). However, typical cheese powders contain about 0.5 to 1.5% salt or sodium chloride (Fundamentals of cheese Science, Page 478, Table 19-7). Thus dried cheese powders and flavors with 0.5 to 1.5% salt have been known in the art (Andrews and Fundamentals of Cheese Science). Further salt is a well-known flavor enhancer and in cheeses salt is known to suppress the growth of unwanted organisms. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Andrews and include more salt in the cheese based dry coating composition in order to enhance the saltiness of the coating and also provide the coating with long shelf life by suppressing the unwanted microbial growth.

Art Unit: 1794

Further, applicant's attention is invited to *In re Levin*, 84 USPQ 232 and the cases cited therein, which are considered in point in fact situation of the instant case. At page 234, the Court stated as follows:

This court has taken the position that new recipes or formulas for cooking food which involve the addition or elimination of common ingredients, or for treating them in ways which differ from the former practice, do not amount to invention, merely because it is not disclosed that, in the constantly developing art of preparing food, no one else ever did the particular thing upon which the applicant asserts his right to a patent. In all such cases, there is nothing patentable unless the applicant by a proper showing further establishes a coercion or cooperative relationship between the selected ingredients, which produces a new, unexpected and useful function. *In re Benjamin D. White*, 17 C.C.P.A. (Patents) 956, 39 F.2d 974, 5 USPQ 267; *In re Mason et al.*, 33 C.C.P.A. (Patents) 1144, 156 F.2d 189, 70 USPQ 221.

Therefore, claim 6, as recited, is obvious over Andrews in view of Fundamentals of Cheese Science.

Response to Arguments

Applicant's arguments filed September 21, 2007 with respect to claims 1-7 have been fully considered but are moot in view of the new ground(s) of rejection.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

Art Unit: 1794

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

1. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jyoti Chawla whose telephone number is (571) 272-8212. The examiner can normally be reached on 8:00 am to 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Keith Hendricks can be reached on (571) 272-1401. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Jyoti Chawla
Examiner
Art Unit 1794



KEITH D. HENDRICKS
SUPERVISORY PATENT EXAMINER